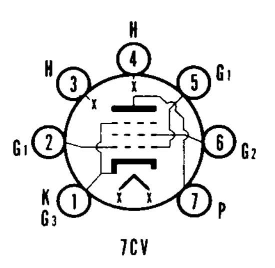


SYLVANIA TYPE 6EH5 12EH5 25EH5 50EH5



MECHANICAL DATA

Bulb	T-5½
Base	E7-1, Miniature Button 7-Pin
Outline	5-3
Basing	7CV
Cathode	Coated Unipotential
Mounting Position	Any

ELECTRICAL DATA

HEATER CHARACTERISTICS

	6EH5	12EH5	25EH5	50EH5	
Heater Voltage	6.3	12.6	25	50	Volts
Heater Current	1200	600	300	150	Ma
Heater Warm-up Time[1]	...	11	...	...	Seconds
Heater-Cathode Voltage (Design Center Values)					
Heater Negative with Respect Respect to Cathode					
Total D C and Peak	200	300	200	200	Volts Max.
Heater Positive with Respect to Cathode					
D C	100	100	100	100	Volts Max.
Total D C and Peak	200	200	200	200	Volts Max.

DIRECT INTERELECTRODES CAPACITANCES (Unshielded)

Grid No. 1 to Plate	0.65 μμf
Input	17 μμf
Output	9 μμf

MAXIMUM RATINGS (Design Center Values)

Class A₁ Amplifier

Plate Voltage	135 Volts
Grid No. 2 Voltage	117 Volts
Grid No. 1 Voltage	0 Volts
Plate Dissipation	5 Watts
Grid No. 2 Dissipation	1.75 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias	0.1 Megohm
Cathode Bias	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	110 Volts
Grid No. 2 Voltage	115 Volts
Cathode Resistor	62 Ohms
Peak AF Grid No. 1 Voltage	3 Volts
Zero-Signal Plate Current	42 Ma
Maximum Signal Plate Current	42 Ma
Zero Signal Grid No. 2 Current	11.5 Ma
Maximum Signal Grid No. 2 Current	14.5 Ma
Transconductance	14,600 μmhos
Plate Resistance (approx.)	11,000 Ohms
Load Resistance	3000 Ohms
Maximum Signal Power Output	1.4 Watts
Total Harmonic Distortion	7 Percent

NOTE:

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.

APPLICATION

The Sylvania Types 6EH5, 12EH5, 25EH5 and 50EH5 are miniature power pentodes designed for service as audio power amplifiers. Type 12EH5 differs from the others in that it is controlled for heater warm-up time and has a higher heater-cathode voltage rating.

6EH5, 12EH5, 25EH5, 50EH5 (Cont'd)



AVERAGE PLATE CHARACTERISTICS

OPERATION CHARACTERISTICS